INTERNATIONAL SCIENTIFIC CONFERENCE ON RAW MILK

Valencia, Spain, October 23th-25th, 2019

UNIVERSITÀ DI PARMA

Giving importance to raw milk lactic acid bacteria: one of the objectives of Farm4PR project

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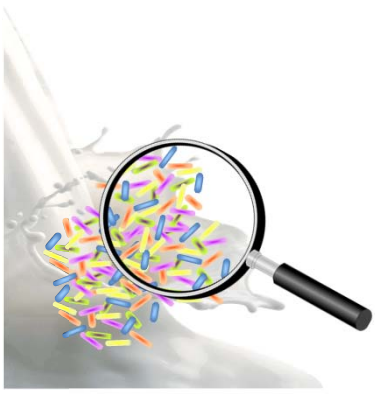
Introduction

The presence of lactic acid bacteria is one of the main valuable aspects of long ripened raw milk cheeses, such as Parmigiano Reggiano. Different species and amounts of LAB can be found in raw milk, representing a solid linkage to the territory. This is in contrast with the current trend in Italy: raw milk is getting poorer in terms of microbial species, as a low microbial count is requested as a quality feature and milk is paid accordingly.



Farm4PR project

Project general aims

- ✓Description and classification of farming systems (feeding, environmental factors..)
- ✓Investigation of the natural aptitude of milk produced in the PR area to be fermented by lactic bacteria.
- ✓Evaluation of the dairy characteristics of the milk produced in the PR district.
- ✓Inclusion of innovative characteristics related to the quality of milk (e.g. LAB count) in the milk payment system of the PR district

One of the main goal is to improve the quality based milk payment, considering LAB count beside total bacterial count

1st year project research activities

Raw milk samples will be taken during 2 weeks per month, for 12 consecutive months. For each week two milks will be sampled from 32 farms. Each of the approximately 1500 milk samples will be subjected to impedometric analysis to quantify LAB (Bancalari et al. Int J Food Microbiol. 2019; 2;306:108268)

Expected outcomes

Results would make it possible to relate the quality of raw milk to a new microbiological character such as the presence of autochthonous lactic acid bacteria, as a consequence of the environmental and farming variables. This aspect appears particularly important because transcending the classical total bacteria count, it could offer a new tool to describe the quality of milk, giving importance to raw milk lactic acid bacteria.

The project is granted by **MIPAAF**, Italian Ministry of Agriculture, Forestry and Tourism (grants for research projects under the Dairy Investment Fund, MD Sept.25th 2018 n. 27443)

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